

Kemp's Point

Volume 18, Number 2, Fall 2017

News from the University of Wisconsin-Madison's Kemp Natural Resources Station

Mushrooms -- Fun, Friendship & Learning

In mid-September, I joined the Northstate Mycological Club for their fall foray at Kemp Station. Nearly 30 people turned out, toting baskets and buckets, field guides and collection knives. There were men and women of all ages. For some, it was their first foray, others had been at it for decades.

The process for the event was simple – spend about 45 minutes collecting in the forest, then return to the Pavilion to discuss what was found. Everyone quickly scattered! I latched on to one of the Club's founding members, Cora Mollen, who was heading into the woods with a friend who had never collected before. Cora is the author of *Fascinating Fungi of the North Woods* and has been leading mushroom forays and sharing her knowledge for many years. I was eager to spend a little time in the woods with her.

We received a lot of rainfall this year, but now, the forest was a little on the dry side, an observation the three of us made right away. As a result, the mushroom hunt was a bit more challenging.

Remember, a mushroom is the fruiting body of a fungus. The mushroom usually grows above ground, or on the food source of the fungus, like dead wood, meaning the rest of the fungus, namely, the mycelium, is underground or in the dead wood. Tear some bark off a rotting log, and you may find mycelium, which often looks like stringy, branching threads. If you compare fungus to a flowering green plant, the mycelium is the roots, stems and leaves and the mushroom is the flower. From the mushroom come spores that provide for the reproduction of the fungus. Mushrooms grow best when moisture and temperature are high enough, which is why late summer and early fall are when

most mushrooming occurs. Mushrooms draw a great deal of moisture from the mycelia, so if it has been dry, the result is fewer mushrooms.

Despite the drier conditions, continuing our search with Cora, we managed to find a nice variety of specimens, varying in size from smaller than a dime to larger than a grapefruit. At each discovery, Cora exclaimed with delight and immediately pointed out unique characteristics of the mushroom. Particularly entertaining was the discovery of a large artist's conk (*Ganoderma applanatum*).

Exhibiting almost superhuman strength, Cora quickly removed the conk from the log (photo at right). This mushroom's common name comes from the fact that the white underside provides a natural art canvas -- when rubbed or scratched, the dark tissue under the white pores are revealed. Ann Harding, another founding member



of the Club, likes to tell of her mother's ritual of having visitors to the family cabin sign their name on an artist conk which were kept in a basket, a collection Ann holds dear.

The group reconvened at the Pavilion, setting (Continued on Page 2)

Mushrooms (From page 1)

up in a circle of chairs. Anne Small, Club Coordinator and Cora's daughter, took center stage and led the discussion. Specimens were identified, discussed and passed around the circle for a closer look, touch or smell. When all curiosities of the day's discoveries were satisfied, the unwanted specimens were discarded, back to the forest.

It was interesting to listen to the various questions participants had about the collected mushrooms. Perhaps the most common was, "Is it edible?" Clearly, wild mushrooms are a sought after treat! A few popular edibles were found that day, including the lobster mushroom, boletes, chanterelles and the honey mushroom. Just for fun, I asked the group why they participated in mushroom forays. Some do it to get into the forest, to explore and enjoy nature. Others value the camaraderie in the group, sharing an interest with others and making connections. Some are in search of the edibles, or to utilize medicinal properties of various mushrooms. And then there's the natural beauty of the mushrooms themselves - many shapes, sizes and colors. What's not to love?

Kemp Station has been a favorite mushroom foray site for the Northstate Mycological Club since it was formed 21 years ago. According to Cora, "The



club actually had the spark for its beginning at Kemp Station. During a naturalist program there, I happened to meet a couple of mushroom enthusiasts. Our conversation there led to the idea of forming a group to study mushrooms of the northwoods area. A first meeting brought together the ten original members of the club and we soon added more early members." Today there are nearly 150 members!

Anyone with even the slightest interest in mushrooms or discovering what grows in the forest will feel welcome in this Club. What makes this group special is the combination of new participants discovering mushrooms for the first time and those with years of experience, sharing their knowledge and continuing to learn even more. -K.O.

The Northstate Mycological Club's website is: northstatemycologicalclub.org

Red banded polypore, Fomitopsis pinicola

When Ann Harding visits Kemp Station she likes to check on a certain red banded polypore that she has been watching since 2013. Also known as the red belt conk, this fruiting body is perennial and produces a new layer of pores on the bottom of the old pores. This fungus degrades cellulose in trees resulting in brown rot. This type of decay makes trees brittle and

prone to wind damage. Photos of "Ann's Polypore" are shown from 2013 to 2017.



King Bolete, Boletus edulis

According to Anne Small, the forest at Kemp Station is great territory for this edible mushroom, one of her favorites. It is popular worldwide, known by many common names, including the Dutch name eekhoorntjesbrood meaning



"squirrel's bread." This mushroom is often found under hemlocks and oaks, where the fungus covers the tree roots with sleeves of fungal tissue. The mushroom cap grows 2-10 inches in size and features pores on it's underside. It is considered one

of the safest edibles as no poisonous mush-room resembles it.

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Kemp Profile: Bill Smith

Your hometown: Sauk City, WI

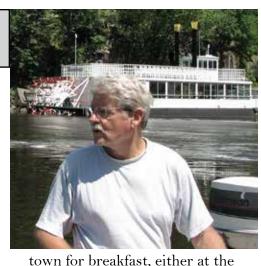
Your position: Official Volunteer, Wisconsin Department of Natural Resources; Retired Zoologist, Natural Heritage Inventory Program

What projects have brought you to Kemp Station this year?: I worked on two projects this year, the first being Northern Goshawk Monitoring. Northern goshawks are a species of Special Concern in WI and were once considered for Threatened status. Nest density is low and restricted in WI to the northern half of the state. Nest site requirements are that the location be locally remote (usually at least a half mile from regular disturbance or paved roads) and that the forest canopy is mostly closed. Some researchers say the birds need old growth as well, but they can be found nesting in mature aspen stands or even pine plantations. They require continuous tracts of forest at any rate. Many nest sites are found in the same stand or area over long periods of time. One site I monitor has had nesting most years since 1980. Logging activity near nests during the breeding season for goshawks can discourage nesting and cause the adults to move. This project arose as an experiment to see the impact of modifying the logging in nest territories in ways that minimize disturbance and canopy breaks near the nest tree. The original study completed by WDNR staff ran from 2002 - 2013, where WDNR biologists worked with foresters across

the northwoods to implement best management practices for forestry management near goshawk nesting areas. I volunteered with Rich Staffen (WDNR - Madison) to do some additional goshawk nest monitoring of these past studied sites as well as sites on State Natural Areas.

My other project is an Investigation of the Nematode Parasite of the nymphs of the dragonfly Family Macromiidae in Northeastern WI lakes. The nematode parasite found in these two dragonfly species, Macromiidae illinoiensis and Didymops transversa, both cruisers or skimmers, is new to science. Also, it is fatal to infected nymphs. While these two species are common in streams, in lakes they are restricted to windswept shoreline areas with sand or gravel substrate. In Wisconsin, infected lakes are restricted to a small area NE of Boulder Junction and a lake in Forest County. We continue to assess the extent of this parasite in lakes as well as assess dragonfly populations in infected lakes over time with the idea that it could possibly eventually limit lake populations and possibly spread to the more common stream populations. Our immediate goal is to verify this is a new species of parasite and to get it described and in the literature.

Describe a typical day of fieldwork: While doing goshawk monitoring, I would head into



Island Café or Woods Inn and have a red eye or early bird special before driving to one of 13 known goshawk nest sites in the Northern Highland-American Legion State Forest. In March and early April, when goshawk monitoring begins, the back roads can be iffy so sometimes it is an hour drive to stay on roads in decent condition. I use a handheld Garmin GPS and hike in to the closest nest on record, usually about 3/4 of a mile or more. Once at the nest site, my objective is to determine if there are breeding goshawks present. The nest site may be occupied, but the birds themselves can be secretive or absent. Recently built, repaired, or decorated large stick nests can indicate occupancy. Other signs of occupancy include the presence of a plucking perch, a place where the male plucks prey items before delivering to the female on nest. Also, presence of molted feathers, pellets, and whitewash can be useful. The gold standard is hearing an alarm call of a defensive adult or having an aggressive bird make close passes overhead. After a site has been surveyed a few times in the spring a judgment is made as to whether or not breeding birds are (Continued on Page 4)



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Future Foresters

Students enrolled in Forest & Wildlife Ecology 100: Introduction to Forestry, visited Kemp Station to learn about sustain-



able forestry, forest management, and the importance of the forest products industry in northern



Wisconsin. At left: Adjunct Professor Bruce Allison demonstrates the Tree Check Sonic Wave Tree Decay Detector that he developed on the UW campus. At right: Course instructors, Professors Mark Rickenbach and Bruce Allison, with the class on Jyme Lake bog.

Profile (From page 3)

present (some years sites are occupied, but no egg laying takes place), if eggs were laid (determined by nest camera or behavior of adults), if young were produced, and finally, if young fledged.

If I find sign of an occupied nest, defensive birds may be present, which requires rapid information gathering and a quick retreat to the car. A goshawk is large, loud, fast, and aggressive towards perceived threats to the nest or young. I often notice nesting birds because of the loud distinctive call made when they detect a disturbance. Particularly aggressive birds will dive at intruders and may strike with their talon-armed feet. I have been hit a few times. When I hear a defensive bird call, my blood pressure goes up and it really spikes if the bird makes close dives. It's a real high!

I work on the dragonfly parasite project with three others: Marla Garrison of McHenry Community College, Dr. Ken Tennessen, Wautoma and Dennis Johnson, Eau Claire, WI. Usually at least three of us meet at Kemp for three days and two nights. We tow a johnboat borrowed from Trout Lake Station and head for either a known parasitized lake of which there are only a few known so far, or a new lake likely to have the host dragonfly species present. These tend to be larger lakes with sections of windswept sandy shores. The two dragonfly species in the Macromiidae found in northern WI lakes are more typical of medium to large streams

with sandy or gravelly bottom. We load the boat with our collecting gear and motor to a likely shore. Using a kick-net we sample the substrate and save

all Macromiid nymphs found and note other odonate species present. Any nymphs obviously parasitized are kept separate for further observations. When we have a sample of at least 100 macromiids we move on to the next lake. Back at Kemp we process the nymphs not obviously parasitized by boiling them to fix the proteins. These are stored in 90% ethyl alcohol



for subsequent identification, measurements and dissection to detect parasites not apparent externally. Parasitized nymphs are generally kept in aerated or refrigerated containers and watched for worms emerging from their hosts.

What challenges have you faced working on these projects?: Bad roads, ticks, restaurants that are closed in March and April.

What have enjoyed most working on these projects?: Several things: the north woods in premosquito spring with an angry goshawk bearing down; red-eye specials at the Island Café; hearing loons call all night from my bunk; the clear northern lakes with undeveloped shorelines and loons

everywhere; the beautiful accommodations a Kemp.

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Reflections on an Adventurous Summer Internship

By Tanya Wieting

This summer I had the opportunity to work with the USDA APHIS Wildlife Services. My program at Fox Valley Tech ran a Mock Interview during spring semester for second-year students with employers in our field. I interviewed with Steve Easterly, WDNR Wildlife Technician for Winnebago and Fond du Lac counties, and Robert Willging, the Northern Wisconsin District Supervisor for USDA Wildlife Services. During the interview with Robert, as he described all the different programs and job responsibilities, I realized it was something I wanted to be a part of. He was able to arrange a Volunteer Internship position with housing assistance. I never

imagined I would get the chance to do the work I did this summer. The most memorable experiences were with beaver trapping, bear trapping/relocation, and wolf abatement projects.

I worked with many of the Northern District

beaver trappers. They all have unique ways of trapping beavers and removing damns. I learned how to look for beaver sign, how to place and camouflage traps, and how to set, clean and maintain the traps. Another responsibility of beaver trappers is dam removal. Dams are removed manually or by blasting. I went blasting with Jeremy, one of the employees on the Explosive Committee. Jeremy and I assisted Ashley, a beaver

trapper, with some dams that were too large and too dangerous to remove by hand. I helped Jeremy set up the explosives, and then he placed them in the dams and attached them to the ignition cord. The length of the cord determined the amount of time we had to find and hide behind a tree far from the explosives before they ignited. When the

blast occurred, I felt the ground shake beneath me and heard debris falling on the other side of the tree. When we returned to the site, there was no evidence of a dam having been there. It was amazing to see how well this technique worked. Smaller dams can be removed by hand. I learned it is easier to start removal below the dam and use the rushing water to your advantage. I used both my hands and a rake to remove all the sticks and muck blocking the flow of the stream. Another opportunity I had was to help locate beaver dams using aviation. In a small plane, we flew over many miles of streams and recorded the GPS coordinates for each dam we saw. The dams

were surprisingly easy to find from above. The view was spectacular and I loved every minute of it.

USDA employees who do bear trapping and relocation are responsible for performing investigations of bear sightings and property damage, setting and trapping the bears with culvert traps, and relocating bears to a safer location. One of the investigations I participated in involved three cubs in an oak

tree above a sow that was reportedly hit by car and died from her injury. After our investigation, we found out that she had been shot, leading to collapsed lungs. We set traps for the cubs below the tree, baited with cookies and a combination of scents pleasing to the cubs. Three hours later, all three

cubs were in the traps. They were taken to a local wildlife rehabilitation facility where they could be cared for and later released. At another investigation, a bear had broken into a shed. There I was given the responsibility of setting the culvert trap on my own.

I adjusted the trap door and placed the cookies (Continued on Page 6)

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Connor Forestry Center Open House Event

More than 100 people attended the Open House for the new Connor Forestry Center on June 29, 2017. In addition to touring the new building, attendees enjoyed a picnic supper while viewing a slide show of the building construction process. Members of the Connor family were in attendance and expressed great satisfaction with the building and the event. Following the event, Dr. Glen Stanosz, UW-Madison, spoke to a capacity crowd about the importance of fungi in forest ecosystems.



Internship (From page 5)

and scents in the bucket that is attached to the trap door trigger. The bear was never trapped because he never returned to that property. A couple weeks later the trap was removed. It was still an amazing learning experience for me.

While assisting with the non-lethal wolf abatement projects, I visited farms to investigate cattle kills. If the kill was indeed caused by a wolf, we would deployed equipment to scare away the wolves. One type of equipment is flagged electric fences, called Fladry, set up around the pastures. The combination of the movement of the red flags and electricity has been proven to be an effective tool to keep wolves away; however, it does not work for other predators. I visited each farm to check the voltage of the fences, making sure the number of volts going through was correct. If it was not correct, we would need to trouble shoot by checking the whole fence to make sure the wire had not been cut or damaged and make needed repairs. Another tool used on farms to keep wolves away is the Scare Radio. This is an ordinary radio attached to giant speakers. The radio is tuned to a talk radio station to simulate people talking and wolves will stay away from the noise. I was responsible for changing the radio batteries weekly.

I also participated in some wolf collaring. Wolf collaring studies help the Wildlife Services understand individual wolves and pack behavior by tracking their movements. Ed, a retired wolf trapper, took me along to check traps. Although there were no wolves trapped, he did catch a coyote in one of his footholds. I helped to release the coyote by holding her down with a restraint while Ed opened the foothold. When her paw was free from the trap I loosened the restraint and she fled the site unharmed.

This summer was one of the best I have ever had. I helped with many other projects as well that were just as exciting to me. The people I worked with were very nice and supportive. They taught me as much as they could, exposing me to as many programs and projects as possible. I very much appreciate Robert Willging for this opportunity — I cannot thank him enough for this amazing summer. I would also like to thank Karla at Kemp Station for arranging my housing at the Mead Residence Hall for the summer. This would not have been possible without her help. I am grateful for everyone who helped me this summer. Thank you everyone!

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Snapshot Wisconsin at Kemp Station

If you haven't heard about Snapshot Wisconsin yet, it is high time that you do! Snapshot Wisconsin is a program lead by the Wisconsin DNR, in partnership with several other agencies and organizations including UW-Madison. Working county by county, the WDNR has been recruiting and training volunteers to deploy and maintain trail cameras on private property. Ultimately, there will be a statewide network

of trail cameras monitoring wildlife year-round. The goals of the project are to provide data needed for wildlife management decisions and to involve individuals, families, and students in the monitoring process.

When I first heard about this program,

I was keen on participating on behalf of Kemp Station. When enrollment for Oneida county opened, I was quick to apply. To qualify, you must have more than 10 acres of land on which to place the camera. The state is divided into 6,600 survey blocks, each 9 square miles in size, and each survey block hosts one camera.

I was excited to receive the email that Kemp had been accepted into the program. My next task



was to attend a training session where I received the trail camera and training on how to deploy and maintain the camera. Key in the process was selecting a good location for the camera. I think we succeeded in that regard based on the variety of wildlife captured in less than two months — 8 different species!

What is neat about this program is you don't need a trail camera to participate. You can help identify



wildlife "trapped" by Snapshot cameras. To review the images set up a log-in at www.zooniverse.org. Once logged in, search for Snapshot Wisconsin by clicking on Projects to access a page with a search box. But beware! Reviewing photos for wildlife can become an addicting pasttime—the NEXT photo just might be really amazing! -K.O.

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Kemp Natural Resources Station 9161 Kemp Road Woodruff, WI 54568





Northern Walkingstick (Diapheromera femorata)

In early September, my mom texted me a photo of a walkingstick. I laughed when I saw it because it immediately took me back to picking raspberries at my grandparent's farm. Every now and then we would find a walkingstick in the raspberry patch and my poor sister would run screaming in fright. To this day she finds them "gross and weird." Perhaps, but they are quite fascinating little creatures that practice camoflague and mimicry. They look very much like a small stick. Adult males are usually brown and 3" long; females are usually brown and green and 3.5"-4" in length. The long body is segmented in appearance, resembling the scars left by buds on a tree branch. When resting, the insect will stretch its front legs forward, along side its long antennae. It can rest for hours in this position, both camoflagued and mimicing a stick! This creature is a leaf eater who is particularly fond of oak. As it walks about to feed, it will sway gently to mimic a branch moving in the breeze. The life cycle of the walkingstick begins when eggs hatch in the ground in spring. The nymph looks like a tiny version of the adult and feeds on foliage low to the ground. As the insect grows larger, it moves higher in the vegetation to feed, ending up in the treetops as an adult. After mating in August, the female drops tiny seedlike eggs from the treetops, to

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the ground. Sufficient moisture is required for the egg to soften in spring so the nymph can emerge. Despite its camoflage and mimicry, they are preyed upon by birds and small mammals. Walkingsticks are also legal to possess as pets. But I don't think my nephews will be getting a pet walkingstick anytime soon!